



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,621	11/24/2003	Madhusudan Raghavan	GP-303804	4248

7590 03/22/2005

KATHRYN A. MARRA
General Motors Corporation
Mail Code 482-C23-B21, Legal Staff
P.O. Box 300
Detroit, MI 48265-3000

EXAMINER

LEWIS, TISHA D

ART UNIT	PAPER NUMBER
----------	--------------

3681

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/720,621

Applicant(s)

RAGHAVAN ET AL.

Examiner

TISHA D. LEWIS

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

The following is a first action on the merits of application serial no. 10/720,621 filed on November 24, 2003.

Information Disclosure Statement

The information disclosure statement filed on November 24, 2003 has been acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 23-35 and claims 11-15 recites limitations for torque mechanisms to selectively interconnect two members in which the members are located on opposite sides of the mechanisms. However, the claims are not specific about which members are on the two opposite sides. Instead, the claims recite alternatives (at least two) for at least one side of the mechanisms. Many combinations that result when one of the alternatives is chosen for each side are not disclosed and/or enabled. By employing this style of claiming, applicant fails to "particularly point out and distinctly claim" the invention as required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8, 10 and 12-18 are rejected under 35 U.S.C. 102(b) as being unpatentable by FR 2706010A1. This reference discloses a epicyclic gearbox with an input shaft (12), an output shaft (18), a first, second and third planetary gear set having first, second and third members, the input shaft being continuously connected to a member (24) of the planetary set, the output shaft being continuously connected to another member (50) of the gear set, a first interconnecting member continuously connecting a first member (28) of the first gear set with a first member (30) of the second gear set, a second interconnecting member continuously connecting a second member (40) of the first gear set with a second member (34) of the second gear set, a third interconnecting member continuously connecting a third member (42) of the second gear set with a first member (46) of the third gear set and seven torque transmitting mechanisms (F1-F5, 64, 66) selectively connecting members of the planetary gear sets with a stationary member or other members of the gear set to provide at least eight forward and one reverse ratio in combinations of two.

As to claim 10, this reference discloses a second torque mechanism (66) selectively connecting a member (42) of the second gear set with a member (52) of the third gear set.

Art Unit: 3681

As to claim 12, this reference discloses a fourth mechanism (F2) connecting a member (32) of the first gear set with a stationary member.

As to claim 13, this reference discloses a fifth mechanism (F4) connecting a member (52) of the third gear set with a stationary member.

As to claim 14, this reference discloses a sixth mechanism (F1) connecting a member (34) of the second gear set with a stationary member.

As to claim 15, this reference discloses a seventh mechanism (F3) connecting a member (56) of the third gear set with a stationary member.

As to claims 16 and 17, this reference discloses a single pinion carrier which can be changed to a double pinion carrier as well known in the art.

As to claim 18, this reference discloses that eleven forward and four reverse ratios can be established.

Claims 8, 12-14 and 16-18 are rejected under 35 U.S.C. 102(b) as being unpatentable by Miller ('013). This reference discloses a epicyclic transmission with an input shaft (X), an output shaft (O), a first, second and third planetary gear set having first, second and third members, the input shaft being continuously connected to a member (S2) of the planetary set, the output shaft being continuously connected to another member (M1) of the gear set, a first interconnecting member continuously connecting a first member (S1) of the first gear set with a first member (S2) of the second gear set, a second interconnecting member continuously connecting a second member (R1) of the first gear set with a second member (M2) of the second gear set, a third interconnecting member continuously connecting a third member (R2) of the

Art Unit: 3681

second gear set with a first member (M3) of the third gear set and seven torque transmitting mechanisms (Bo-B3, C1-C3) selectively connecting members of the planetary gear sets with a stationary member or other members of the gear set to provide at least eight forward and one reverse ratio in combinations of two.

As to claim 12, Miller discloses a fourth mechanism (B1) connecting a member (R1) of the first gear set with a stationary member.

As to claim 13, Miller discloses a fifth mechanism (B3) connecting a member (S3) of the third gear set with a stationary member.

As to claim 14, Miller discloses a sixth mechanism (B2) connecting a member (R2) of the second gear set with a stationary member.

As to claims 16 and 17, Miller discloses a single pinion carrier which can be changed to a double pinion carrier as well known in the art.

As to claim 18, Miller discloses that nine forward ratios can be established (column 5, line 42).

Allowable Subject Matter

Claims 1-7 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(703) 872-9326 before final and 703-872-9327 after final**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission,

Art Unit: 3681

see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to
the Patent and Trademark Office (Fax No. (703) 000-0000) on _____ (Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Schaefer ('071) is a possible 102(b) as to claims 8, 12-14, 16 and 17.

- Haka ('748), Stevenson ('581) and ('580), Martin et al ('738), Ziemer ('324), Miller ('013), Schaefer ('071), Gorrell et al ('445), Murakami et al ('946), ('623), (268) and ('888), Ott et al ('031), Gaus ('925), Schreiner ('106), Peterson ('282), Hiraiwa ('439) and Windish ('428).


Art Unit: 3681

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TISHA D. LEWIS whose telephone number is 703-305-0921. The examiner can normally be reached on M-Thur 8 AM TO 3 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES A. MARMOR can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tdl
March 17, 2005


TISHA LEWIS
PRIMARY EXAMINER
Au 3681 3/17/05